

## CLAIMS

What is claimed is:

1. A method for returning a phone call based on information in a voicemail message  
5 corresponding with the phone call, the method comprising:

receiving the voicemail message;

applying service logic to analyze the voicemail message to extract a spoken phone  
number included in the voicemail message;

associating the extracted phone number with the voicemail message; and

10 in conjunction with retrieving the voicemail message, providing a recipient of the  
voicemail message with an option to dial the extracted phone number.

2. The method of claim 1, further comprising responsively dialing the extracted  
phone number as a result of the recipient selecting the option to dial the extracted phone number.

15 3. The method of claim 2, wherein dialing the extracted phone number comprises  
dialing the extracted phone number with a speech recognition dialer.

4. The method claim 2, wherein the recipient selects the option by one of depressing  
20 a specific key or speaking an appropriate response corresponding with the option.

5. The method of claim 1, further comprising:  
determining an originating phone number associated with the phone call; and  
providing the recipient of the voicemail message with an option to dial the originating  
phone number.

5

6. The method of claim 5, further comprising responsively dialing the originating  
phone number as a result of the recipient selecting the option to dial the originating phone  
number.

10

7. The method of claim 5, further comprising:  
providing the recipient of the voicemail message with an option to dial an alternative  
phone number associated with originating phone number.

15

8. The method of claim 7, further comprising responsively dialing the alternative  
phone number as a result of the recipient selecting the option to dial the alternative phone  
number.

9. The method of claim 1, wherein applying service logic to analyze the voicemail  
message comprises:

20

analyzing the voicemail message using a set of machine executable instructions  
implementing a speech recognition engine, the speech recognition engine employing a set of  
grammars for extracting the spoken phone number from the voicemail message.

10. The method of claim 9, wherein analyzing the voicemail message comprises determining the presence of, and extracting at least one of: a seven digit phone number, a ten digit phone number, an eleven digit phone number and an international phone number.

5 11. The method of claim 9, wherein analyzing the voicemail message comprises employing the grammars to determine the presence of two, three and four digit numbers in the voicemail message.

10 12. The method of claim 9, wherein analyzing the voicemail message comprises employing the grammars to associate the numeral zero with an utterance corresponding with the letter "O" when extracting the spoken phone number.

13. The method of claim 1, further comprising:  
determining an originating phone number associated with the phone call, wherein  
15 associating the extracted phone number with the voicemail message comprises comparing the extracted phone number with the originating number; and

in the event the extracted number matches the originating number, responsively determining not to provide the recipient of the voicemail message with a duplicate option to dial the originating number.

20 14. The method of claim 13, further comprising:  
comparing the extracted phone number with an alternative number associated with the originating number; and

in the event the extracted number matches the alternative number, responsively determining not to provide the recipient of the voicemail message with a duplicate option to dial the alternative number.

5           15.     A method for returning a phone call from a voicemail service comprising:  
receiving a voicemail message at a voicemail user interface of the voicemail service;  
determining an originating telephone number associated with the voicemail message;  
communicating the voicemail message to a message store;  
communicating the voicemail message to a message processing entity;  
10           analyzing the voicemail message using machine executable instructions included in the  
message processing entity, so as to extract a spoken phone number contained in the voicemail  
message;  
              associating the extracted phone number with the voicemail message in the message store;  
and  
15           in conjunction with retrieving the voice mail message:  
              providing a recipient of the voicemail message separate options to dial one of the  
originating phone number and the extracted phone number when the originating phone  
number and the extracted phone number are different; and  
              providing the recipient of the voicemail message with a single option to dial the  
20           originating phone number when the originating phone and the extracted phone number  
are the same.

16. The method of claim 15, wherein communicating the voicemail message to the message store and communicating the voicemail message to the message processing entity occurs substantially simultaneously.

5 17. The method of claim 15, wherein the voicemail message is communicated from the voicemail user interface to the message store and then communicated from the message store to the message processing entity.

10 18. The method of claim 17, wherein communicating the voicemail message from the message store to the message processing entity occurs after the complete voicemail message is communicated from the voicemail user interface to the message store.

19. The method of claim 15, further comprising:  
with the voicemail user interface, preprocessing the voicemail message prior to  
15 communicating the voicemail message to the message store and the message processing entity.

20. The method of claim 19, wherein preprocessing the voicemail mail message comprises applying service logic to modify the voicemail message by, at least one of:

removing periods of silence in the voicemail message;

20 enhancing audio quality of the voicemail message; and

allowing a caller leaving the voicemail message to effect changes in content of the voicemail message.

24. The method of claim 15, wherein associating the extracted phone number with the voicemail message in the message store comprises:

communicating the extracted phone number to the message store; and

storing the extracted phone number in a data field associated with the voicemail message

5 in the message store.

25. The method of claim 15, wherein providing the recipient of the voicemail message the option to dial the originating phone number comprises employing one of a text-to-speech converter and a digital audio file player to recite the originating phone number using the  
10 voicemail user interface.

26. The method of claim 15, wherein providing the recipient of the voicemail message the option to dial the extracted phone number comprises employing one of a text-to-speech converter and a digital audio file player to recite the extracted phone number.  
15

27. The method of claim 26, wherein the extracted phone number is stored in the message store in a text data field associated with the voicemail message.

28. The method of claim 26, wherein a portion of the voicemail message containing  
20 the extracted phone number is stored in the message store in a digital audio file associated with the voicemail message.

29. The method of claim 15, wherein the originating phone number is determined from caller-id information associated with the phone call.

30. A voicemail system comprising:  
5 a voicemail user interface;  
a message store operatively coupled with the voicemail user interface; and  
a voicemail message processor operatively coupled with the message store, wherein the voicemail message processor comprises service logic for:

analyzing the content of a voicemail message received at the voicemail user  
10 interface;

extracting a spoken phone number included in the voicemail message; and

communicating the extracted phone number to the message store, the extracted phone number being associated with the voicemail message in the message store, and

wherein the voicemail user interface comprises service logic for providing a recipient of  
15 the voicemail message an option to dial the extracted phone number in response to the voicemail message.

31. The system of claim 30, wherein the voicemail user interface comprises a telecommunications platform including machine executable instructions that, when executed,  
20 provide for:

playing a greeting to a caller, the greeting prompting the caller to leave the voicemail message;

capturing and storing, at least temporarily, the voicemail message from the caller;

communicating the voicemail message to the message store; and  
providing the option to the recipient of the voicemail message to dial the extracted phone  
number.

5           32.    The system of claim 31, wherein the message store comprises:

a storage device including a voicemail message database storing the voicemail message  
once communicated from the voicemail user interface and one or more associated data fields  
corresponding with the voicemail message.

10           33.    The system of claim 32, wherein the one or more associated data fields comprises  
an extracted phone number data field storing the extracted phone number and at least one of:

an originating phone number data field storing an originating phone number  
corresponding with the voicemail message; and

an alternative phone number data field storing an alternative phone number associated  
15 with the originating phone number.

34.    The system of claim 33, wherein the alternative phone number is included, and  
associated with the originating phone number, in an address book database operatively coupled  
with one of the voicemail user interface and the voicemail message processor.

20           35.    The system of claim 33, wherein the voicemail user interface determines the  
originating phone number based on caller-id information.



36. The system of claim 33, wherein the voicemail user interface includes machine readable instructions to determine the alternative phone number by comparing the originating phone number with previously stored information associated with the recipient of the voicemail message.

5

37. The system of claim 31, wherein the message store comprises machine executable instructions that, when executed, provide for communicating the voicemail message from the message store to the voicemail message processor.

10

38. The system of claim 30, wherein the voicemail message processor is further operationally coupled with the voicemail user interface and the voicemail user interface substantially simultaneously communicates the voicemail message to the message store and the voicemail message processor.

15

39. The system of claim 30, wherein the service logic of the voicemail message processor implements a speech recognition engine that extracts the spoken phone number from the voicemail message.

20

40. The system of claim 39, wherein the spoken phone number comprises one of a seven digit phone number, a ten digit phone number, an eleven digit phone number and an international phone number.

41. The system of claim 30, further comprising a speech recognition dialer for dialing the extracted phone number.